Ethiopia Halts Prehistory Research

A tangled and unpleasant web of intrigue surrounding U.S. scientists has endangered the future of research in the fossil-rich territories of Ethiopia

The government of Ethiopia has brought to a halt all foreign prehistory expeditions in a country that, arguably, has the richest source of fossils relating to early human origins. The ban, announced last October, will remain in effect until a special committee under the commissioner for science and technology draws up new rules governing the work of visiting research workers.

The immediate casualty of the moratorium was a half-million-dollar, National Science Foundation (NSF)–funded project organized by Desmond Clark and Tim White at the University of California, Berkeley. Donald Johanson, now based in Berkeley at his newly established Institute of Human Origins, was also hoping to return last fall to the Hadar region where, among other important fossils, "Lucy" was found. As it turned out, the Berkeley researchers spent a frustrating few weeks in Addis Ababa trying to uncover the cause of the moratorium and doing what they could to prepare for field trips planned for fall 1983.

"We are not being anti-American or nationalistic," insists Haile Lul Tebike, the commissioner of science and technology. "We are merely trying to establish in Ethiopia the kind of rules and regulations that govern this type of research activity in other countries." Tebike's committee has been taking evidence from scientists in Ethiopia and elsewhere since October. "I can't say our work will be finished next year," he told *Science* in a telephone interview at the end of December. "I can say that we have no interest in delaying a decision."

Ethiopia's actions in rethinking its policy on the conditions under which foreign scientists conduct research on its territory can be seen as a logical and inevitable step in the country's steady emergence from imperial rule since the revolution in 1974. Many developing nations have wrestled with the problem of harmonizing foreign research effort with the host countries' own needs. Ethiopia is no exception.

In this case, however, there is a tangled history beneath the main issue that impinges on and must inevitably complicate its resolution. Accusations of CIA subversion, indiscretions revealed in best-selling books, putative scurrilous campaigns orchestrated from afar—all are threads in an acrimonious network of assertion and counterassertion between certain groups of foreign researchers. As one prominent paleoanthropologist remarks, "This kind of behavior isn't going to help anyone who wants to work in Africa."

When Clark and White returned from their aborted trip they submitted an explanatory report to Steven Brush, program director for anthropology at the NSF. "We were assured by all officials that the action was *not* directed against our expedition and that we would be invited to continue our research once new antiquities regulations were formulated," states the report. Clark and White say they talked informally with officials to discover "the deeper reasons behind the suspension."

Prominent among these reasons was a concern that visiting scientists have exploited the resources of Ethiopia while giving little attention to training local scholars or to developing local facilities. Clark and White suggest that French expedition groups are the greater sinners in this respect. They point out that "The [Clark-White] team has taken major steps to correct this problem by building a laboratory with NSF funding . . . and by training students and technicians." Nevertheless, whatever the intentions of the Berkeley team, it appears after querying the Ethiopians that many suspect that the facility is for the exclusive use of the Americans.

Responsibility for antiquities research has for some years rested uneasily between the ministry of culture and sports and the University of Addis Ababa. It is the ministry under which antiquities regulations were drawn up under the Emperor Haile Selassie. And it is the ministry with which the Berkeley expedition is primarily identified, in spite of Clark's very deliberate efforts to establish contacts with university faculty. In their NSF report, Clarke and White suggest that a temporary political weakness in the ministry of culture is being exploited by those who wish to deny access to foreign researchers tainted with the pre-revolutionary status quo. "Certain interests have seized this opportunity to try to obtain a complete revision of procedures relating to antiquities," they note in a conspicuous tone that pervades much of the report. Asked which interests he was specifically referring to, White told *Science*, "I can't say. But I do know that there are people who think the ministry should not have complete control of antiquities."

The principal set of "deeper reasons" outlined in the NSF report plumbs a deep and labyrinthine source of controversy that surely will never be resolved and continues to sour antiquities research in Ethiopia. Briefly the tale is as follows.

In 1975 Jon Kalb, a geologist now at the University of Texas at Austin, formed the Rift Valley Research Mission in Ethiopia, an organization based in Addis Ababa. In collaboration with several U.S. scientists, and with a group of Ethiopian students, Kalb undertook anthropological, archeological, and geological research in the Middle Awash region. This is the site where the Berkeley team worked in the fall of 1981 and from which they were barred in 1982. Before setting up the research mission, Kalb had been associated with Johanson as part of the International Afar Research Expedition. The two parted company at the end of 1974 because of, in Kalb's words, "disputes . . . over scientific and management issues."

By 1978 persistent rumors were circulating in Addis Ababa and elsewhere that connected Kalb with the CIA. In August of that year the Ethiopian Security asked Kalb to leave the country. The research mission collapsed after his departure and some of the students associated with it found themselves adversely affected by the atmosphere of suspicion generated by the affair. Investigations by the NSF, soon after Kalb returned to the United States and again at the end of last year, failed to reveal any evidence that would substantiate the rumors.

Less than 2 weeks after Kalb's enforced departure from Ethiopia, Clark wrote to Bisrat Dilnessahu, dean of the faculty of science at Addis Ababa University, outlining a proposed expedition

to the Middle Awash region, the area where the research mission had worked. For various reasons, some of which had to do with the unstable political situation in Ethiopia, the Berkeley team's first expedition to the Middle Awash had to wait until the fall of 1981. This expedition is, of course, now halted by the moratorium.

The upshot of these events is that Kalb feels that a legitimate claim on access to the Middle Awash and other localities established by his colleagues in the research mission, both American and Ethiopian, has been unfairly and unethically overridden by the Berkeley team. Clark and White, on the other hand, believe that Kalb is now so embittered he will go to any lengths to deny them their rightful access to these archeologically and paleontologically rich areas.

Skulls compared

Tim White (left) holds a fragment of a 4-million-year-old hominid skull, found in the Middle Awash in 1981, and compares it with that of an ape and a modern human, held by Desmond Clark.

In fact, although Clark has been portrayed as opportunistically moving in on Kalb's abandoned research site, he was invited to work there by a member of the research mission, Fred Wendorf of Southern Methodist University, Dallas. Wendorf had to choose between developing archeological sites in Ethiopia or continuing with projects at younger sites in the Nile Valley. He selected the latter and invited Clark to take over in the Middle Awash.

Clark has maintained friendship and professional ties with Wendorf since that time, and Wendorf was to have visited the Middle Awash had the fall 1982 field trip taken place. Clark had also hoped to involve other members of the research mission, specifically Glenn Conroy of Brown University, in the new Middle Awash project. However, Conroy was unable to take part in the 1981 field season because of other commitments. White, an aggressive young American, was asked to join Clark, a very proper English gentleman, to form an apparently oddly matched, but actually very successful, partnership.

Clark's efforts to include research mission personnel in this venture, however, left four of Kalb's Ethiopian students feeling that they had been deliberately excluded. Ethiopian interests were being ignored, they believed. So, on 15 September 1981, just as Clark's first field trip to the Middle Awash was under way, they submitted a document to Ethiopian government and academic officials. Entitled, "Petition for an Ethiopian Prehistory Reserve in the Middle Awash Valley," the document claimed for the students priority in the Middle Awash, stated their belief that French and American researchers had neglected to train Ethiopian students until very recently, and pleaded that the government should "consider our request and its implications on Ethiopian development and pride." The four students were all in the United States on Fulbright scholarships at the time.

On hearing of the petition Clark wrote to the head of the Centre for Research and Preservation of Cultural Heritage suggesting that an invitation to join the expedition should be sent to the students, whose whereabouts were unknown to him. Sleshi Tebedge, one of the Ethiopian students who is at the University of Texas at Austin, says that he and his colleagues did not receive the invitation. "In any case, why should we have to be invited by Clark? That is our research area."

Later, Tebedge and Tsrha Adefris, a student with anthropologist Clifford Jolly at New York University, applied for grants to return to Ethiopia in 1982 for separate research projects. Tebedge planned to do some preliminary paleontology and geology in the Middle Awash. Adefris wanted to learn fossil preparation methods in Nairobi so she would be able to clean and restore the Bodo skull, a 300,000-year-old *Homo erectus* cranium found in 1976 by Kalb's research mission. Neither student's request—variously to the Leakey Foundation and the Foundation for Research into the Origins of Man—was successful. Tebedge was advised that it would make good sense to join Clark's expedition. Clark wrote to Tebedge in June 1982 confirming the invitation.

Nevertheless, Tebedge wanted nothing to do with the project and instead went independently to Ethiopia on Wenner Grenn money. When he arrived he found his way to the field blocked because Clark already had the required permit to work there.

Meanwhile, Adefris had returned to Addis Ababa earlier in the year to take up a teaching post at the university. She was surprised to discover that the Bodo skull was no longer in Addis: it had been removed on a 9-month loan to Berkeley where White was cleaning and reconstructing it. "The Berkeley people had the appropriate permission to take the skull," says Jolly, "but it would have been polite to have asked us too." Jolly was a member of the team that found and described the skull initially.

White contends that the skull had been lying around for 6 years inadequately cleaned and inadequately reconstructed. He wanted to work on it for the benefit of the Ethiopian collection. Kalb acknowledges that much worked remained to be done with the specimen and says that he and his colleagues wanted Bodo to remain in Ethiopia where trained Ethiopians would eventually prepare it.

Incensed by being prevented from going to the field as planned, and indignant at what he saw as the unethical removal of the Bodo skull, Tebedge joined forces with Adefris in lobbying officials to block the second stage of the Berkeley expedition. They were following up on the spirit of their 1981 petition.

There can be little doubt that the students' efforts during the summer was an important factor in the imposition of the moratorium. "It acted as a catalyst for what many people were feeling," comments Tewolde B. G. Egziabher, the former dean of the faculty of science at Addis Ababa University.

In their report to the NSF, Clark and White describe the students' actions as a campaign of propaganda. "They contacted governmental and university officials and poisoned the atmosphere with a welter of false and ridiculous accusations that we had stolen fossils from Ethiopia,

excluded Ethiopians from the field, failed to train Ethiopians, failed to provide facilities in Ethiopia et cetera et cetera."

Tebedge admits that on occasion he might have overstated his case, "because this is an emotional issue." But, on the whole, he says, he simply explained his cause and found a very receptive response. "Many Ethiopians are angry at the way the Berkeley people have behaved, and they are especially angry at some of the things Johanson wrote in his book *Lucy*."

For instance, in *Lucy* Johanson describes how he and a colleague, Tom Gray, removed a leg bone from a recent Ethiopian grave for comparison with a fossil knee joint some 3 million years old. All Ethiopians contacted by *Science* were indeed dismayed by this episode. "Desecrating graves is not tolerated in any culture, is it?" comments the commissioner for science and technology.

"Johanson also makes remarks about Ethiopian politics and culture and about the behavior of officials in government—bribes and ignorance and so forth," says Egziabher. "He gives the impression he doesn't care about Ethiopia. He should refrain from making comments on subjects he knows little about."

Tebedge says that the indiscretions in *Lucy* have played a large part in coloring Ethiopian feelings toward Johanson. "No one has ever said anything to me about these things," retorts Johanson. He says that he is firmly committed to helping Ethiopia, not maligning it.

In their assessment of the events of last summer, Clark and White wrote that the students' "campaign of propaganda . . . was carefully orchestrated by American 'researchers' posing as advisers to these students." Clark and White are skeptical of the students' motives in returning to Ethiopia in 1982. "The students were sent by their advisers to perform 'research.' "

Kalb dismisses these strong innuendos as "pure fantasy." Jolly merely comments mildly, "Well, people get angry when they spend a lot of money on a project and are then thwarted." Tebedge says that, yes, Kalb supported him in his efforts, but that he and Adefris needed no prompting to try to procure what they believe to be their rightful recognition.

Clearly, feelings run high on both sides of this conflict, and there are legitimate complaints on both sides too. It might have been wise, for instance, had the Berkeley team made a more determined effort to involve more directly people who had been associated with the research mission. But the central complaint against Clark—that he failed to include Ethiopians in his projects—seems to have been overstated to the point of distortion.

"Clark has worked in many parts of Africa over many decades," says Glynn Isaac, an archeologist at Berkeley. "He has always been assiduous in helping and training local students and academics." Noel Boaz, an anthropologist at New York University, agrees. "Desmond has always done his best to arrange for foreign students to study at Berkeley. He was one of the first people to do this."

Since 1974, Clark's expeditions in Ethiopia have always included one or two local students and one or two faculty from Addis Ababa University. This holds true for the current project in the Middle Awash. In addition, Clark has recently arranged for three Ethiopian graduate students to study for doctorates in the United States, two at Berkeley and one at Case Western Reserve University.

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In light of this, Clark's overtures to students previously associated with the research mission are likely to have been genuine. The students, and Kalb, interpret them as political moves to head off recognition of prior claims by others to the Middle Awash.

Meanwhile, the committee under the commissioner for science and technology is trying to decide how best to proceed with antiquities regulations. At issue is the wider problem of how you build research in Third World countries.

Early on in their deliberations the committee contacted Richard Leakey, director of the National Museums of Kenya, asking for information on how antiquities research is organized in that country. "Foreigners are expected to operate through national institutions involved in this kind of work," he told *Science*. "They have an obligation not to take material out of the country and to develop within the country facilities where they can be studied."

David Pilbeam, a Harvard paleontologist who does fieldwork in Pakistan, emphasizes the importance of academic links and an atmosphere of scholarship in establishing a fertile research center. "It's not so much the facilities that matter. It is the people who are able to have frequent contact with each other that makes research successful." Pilbeam also notes that Ethiopia, being a poor country with as yet a small scientific base, might best concentrate on training geologists and anatomists who might develop interests in paleoanthropology rather than try to produce paleoanthropologists per se.

If Ethiopia were to decide that no prehuman fossils would ever leave the country, then the presence there of this great prehistoric treasure trove might attract international funds for building facilities for their study, just as happened in Kenya during the 1970's. "The position of the NSF in this is very difficult," says Brush. "Our role is to enhance science in the United States, not to enhance science in a host country. Inevitably, though, in a science of this nature, the two are very much intertwined." The expenditure of research funds with benefit to a host country as part of the program shades quickly into international aid, and there is no good mechanism for handling such a procedure decisively.

Major projects in paleoanthropology these days involve many individuals of many different disciplines from many institutions. Usually it is an international effort, as is Clark's Middle Awash expedition, which comprises six local and nine foreign scientists. "Ethiopia should not see it as denigrating to have international collaborative projects in this area," says Pilbeam. "It is impossible for any single institution to plan such an expedition. What is important is the genuine and productive involvement of local researchers and students."

Amid the resentment among some Ethiopians that visiting scientists have ignored local needs is a recognition that the host country shares some responsibility too. "I am not blaming the foreign scientists for letting us down," says Egziabher. "I am bemoaning the fact that we have let ourselves down. We have not had a proper system that has emphasized training and with which visiting scientists could readily work."

Such a system is now being forged. At the same time the first generation of students trained in various aspects of paleoanthropology are beginning to assert themselves. It would surely be a tragedy if the unfortunate history of the past few years were to erect an unbreachable barrier between those Ethiopians previously associated with the research mission and those now linked with Berkeley. Such a division in the country's intellectual resources would be of service to no one.—**ROGER LEWIN**